



This is a digital copy of a book that was preserved for generations on library shelves before it was carefully scanned by Google as part of a project to make the world's books discoverable online.

It has survived long enough for the copyright to expire and the book to enter the public domain. A public domain book is one that was never subject to copyright or whose legal copyright term has expired. Whether a book is in the public domain may vary country to country. Public domain books are our gateways to the past, representing a wealth of history, culture and knowledge that's often difficult to discover.

Marks, notations and other marginalia present in the original volume will appear in this file - a reminder of this book's long journey from the publisher to a library and finally to you.

Usage guidelines

Google is proud to partner with libraries to digitize public domain materials and make them widely accessible. Public domain books belong to the public and we are merely their custodians. Nevertheless, this work is expensive, so in order to keep providing this resource, we have taken steps to prevent abuse by commercial parties, including placing technical restrictions on automated querying.

We also ask that you:

- + *Make non-commercial use of the files* We designed Google Book Search for use by individuals, and we request that you use these files for personal, non-commercial purposes.
- + *Refrain from automated querying* Do not send automated queries of any sort to Google's system: If you are conducting research on machine translation, optical character recognition or other areas where access to a large amount of text is helpful, please contact us. We encourage the use of public domain materials for these purposes and may be able to help.
- + *Maintain attribution* The Google "watermark" you see on each file is essential for informing people about this project and helping them find additional materials through Google Book Search. Please do not remove it.
- + *Keep it legal* Whatever your use, remember that you are responsible for ensuring that what you are doing is legal. Do not assume that just because we believe a book is in the public domain for users in the United States, that the work is also in the public domain for users in other countries. Whether a book is still in copyright varies from country to country, and we can't offer guidance on whether any specific use of any specific book is allowed. Please do not assume that a book's appearance in Google Book Search means it can be used in any manner anywhere in the world. Copyright infringement liability can be quite severe.

About Google Book Search

Google's mission is to organize the world's information and to make it universally accessible and useful. Google Book Search helps readers discover the world's books while helping authors and publishers reach new audiences. You can search through the full text of this book on the web at <http://books.google.com/>

TRANSPORTATION
LIBRARY

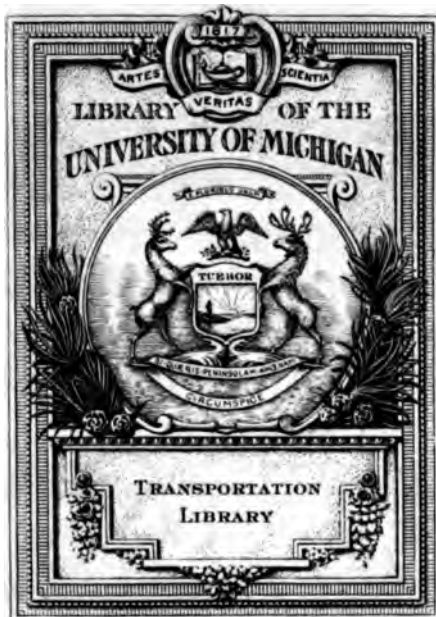
TA
140
W3
L8

A

752,667


MONUMENT
TO
JAMES WATT

Railways
69



Transportation
Library

TA
140
.W3
L8



London. Citizens

PROCEEDINGS

OF THE

PUBLIC MEETING

HELD AT

FREEMASONS' HALL,

ON THE

18TH JUNE, 1824,

FOR

ERECTING A MONUMENT

TO THE LATE

JAMES WATT.



LONDON :
JOHN MURRAY, ALBEMARLE-STREET.

1824.



LONDON:

PRINTED BY THOMAS DAVISON, WHITEFRIARS.

*Transport,
Thorp,
11-15-46*

INTRODUCTION.

MANY of the friends and admirers of the late Mr. Watt had long regretted that no tribute of national gratitude had been paid to a man whose inventions had so essentially promoted the prosperity and increased the resources of the British empire, and whose talents and discoveries as a philosopher were universally allowed, both at home and abroad, to have conferred honour upon his country.

Those feelings were strengthened by the recent exhibition of his statue by Chant-

rey; not more admirable as an exquisite work of art, than as a striking and characteristic resemblance; and by the appearance, nearly at the same time, of an interesting, though brief memoir of his life, in the last volume of the Encyclopedia Britannica, to which the beautiful delineation of his character by Mr. Jeffrey was subjoined. Time and reflection had contributed to enhance their estimate of Mr. Watt's extraordinary merits, while the beneficial effects of his inventions were every day becoming more and more conspicuous in all parts of the civilized world.

It was known that the statue was intended by the present Mr. Watt to be placed over his father's remains in the

parish church of Handsworth, in Staffordshire ; and that another statue, for which that gentleman had engaged the same great artist, was designed by him to be presented to the university and city of Glasgow, as a mark of respect to the place where his father's talents had been first encouraged, and where his great improvement in the principle of the Steam Engine had been made. But the friends of Mr. Watt were decidedly of opinion that it should not be left to filial piety alone to commemorate genius and talents from which the whole community had derived such signal benefits ; and they, in consequence, formed the resolution of erecting an appropriate memorial in the metropolis of the British empire, by private subscription among

themselves. They could not, however, divest themselves of the conviction that Mr. Watt had peculiar and indubitable claims to the highest honours that are ever conferred by government on men who have deserved well of their country; and under this persuasion, they considered it right to make application to his Majesty's ministers to sanction a vote of parliament for the erection of a suitable monument, either in Westminster Abbey or in St. Paul's Cathedral.

To this application a prompt and willing attention was given by the leading members of administration. It appeared to accord with their own wishes and opinions; and expectations were for some

time entertained of its being carried into effect. But no precedent could be discovered for such a measure, and ministers felt great difficulty in establishing one which might eventually place them under the painful and invidious necessity of discussing the merits of other eminent men, for whom claims might be brought forward. In intimating this difficulty, they at the same time announced the high sense which His Majesty entertained of the merits and public services of Mr. Watt, and his gracious desire to contribute a large sum towards the erection of a monument by public subscription. Ministers likewise expressed their own individual wishes to take a prominent part in the execution of such a plan ;

which supported, as they were convinced it would be, by the general concurrence of the country, would become a national tribute to Mr. Watt's merits, and a permanent record of the public gratitude.

To a proposal so honourable to the memory of Mr. Watt, his friends gave a ready and cordial assent, and as the session of parliament was drawing to a close, and many of its members most friendly to the measure were leaving town, it was resolved to call a public meeting in London, to be held as speedily as circumstances would admit. A notice was accordingly inserted in the newspapers, and addressed by circular, to those gentlemen who were presumed likely to take an


interest in the proceedings. The unavoidable shortness of time prevented the attendance of many warm friends of Mr. Watt from distant parts of the kingdom—yet it may truly be said, that a meeting more distinguished by rank, station, and talent, was never before assembled to do honour to genius, and to modest and retiring worth; and that a more spontaneous, noble, and discriminating testimony was never borne to the virtues, talents, and public services of any individual in any age or country.

To present an authentic record of the proceedings of that meeting is the object of the following pages,—proceedings as honourable to the Monarch who pa-

tronized, as to the eminent statesmen and distinguished men who bore a part in them ; and which must ever prove a source of pride and gratification to the friends of Mr. Watt.

C. H. TURNER,
Chairman of the Committee.

Rook's Nest,
Godstone, Nov. 1, 1824.

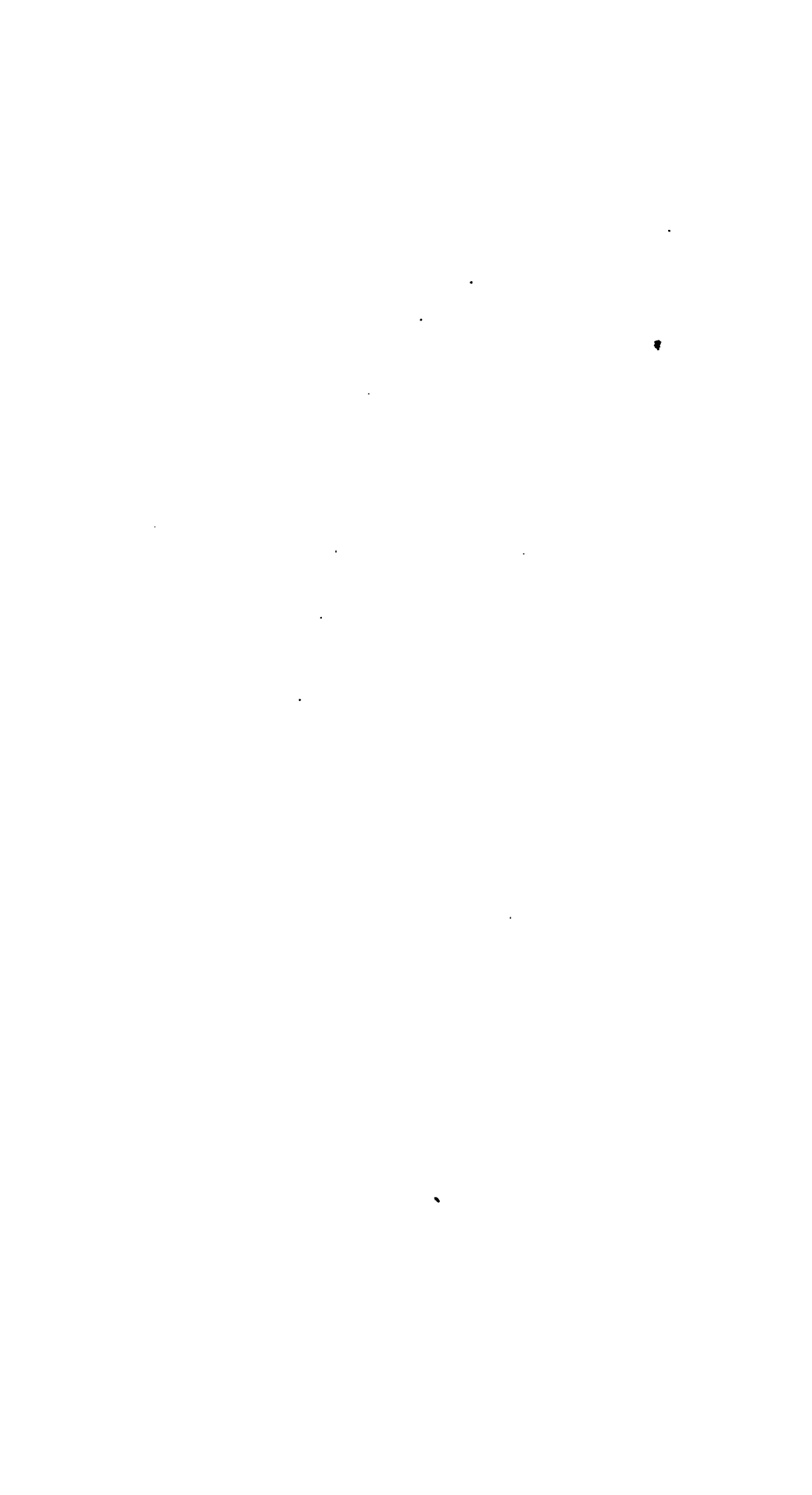


MONUMENT TO MR. WATT.

A PUBLIC meeting will be held at the Freemasons' Tavern on Friday next, the 18th instant, at one o'clock, to consider of the propriety of erecting a monument to the late James Watt, as a tribute of national gratitude to him, who by his genius and science has multiplied the resources of his country, and improved the condition of all mankind.

The Earl of Liverpool, K. G. in the Chair.

June 12, 1824.





PROCEEDINGS

AT THE

FREEMASONS' TAVERN.

EARL OF LIVERPOOL.

Gentlemen :—We are assembled here for the purpose of paying a public tribute of respect and gratitude to the memory of one of the most extraordinary persons to whom our country has given birth. It will not be denied that, amongst the benefactors of mankind, there are few who can have a greater claim to public gratitude than those who have improved the *productive powers of human industry*; and where

shall we find in modern times, or I may say in any age of the world, such an invention as the Steam Engine? Of that invention the late Mr. Watt, by his improvements, may be said to have been almost the author. It was by his steady perseverance, by the sagacity of his mind, by his patient thinking, that he was enabled to apply the profoundest principles of science to the practical purposes of life ; and by abridging human and animal labour, and increasing the force of mechanical power, to augment incalculably the resources of his own country, and even of the whole world.

Gentlemen :—in such an assembly as the present, where there must be so many much better qualified to descant upon such a subject than I am, it would be presumptuous in me to say much of the merits of the invention of which Mr. Watt was the author.

I cannot avoid, however, saying a little upon it. It has been compared to the trunk of the elephant, and the comparison is so far just that there is nothing so small and nothing so great that it will not reach. It has improved the texture of the most refined manufactures, whilst at the same time half of the difficulties of navigation have vanished before it. Gentlemen:—we have now no delay in our communications with any part of the world. Whatever it may be necessary to communicate, and to whatever quarter, be the winds friendly or be they contrary, the power of the Steam Engine overcomes all difficulties. Gentlemen:—I have known in time of war when the fate of a campaign, and possibly the fate of a war, might depend upon getting a fleet out of port—contrary winds have prevailed for months, and the whole objects of government have been thereby

defeated. Such difficulties can now no longer exist. Let the wind blow from whatever quarter it may, let the destination of our force be to whatever part of the world it may, you have the power and the means, by the Steam Engine, of applying that force at the proper time and in the proper manner.

I will not detain you longer upon the merits of this invention ; but I must say a few words upon the respected author of it, who is the immediate subject of our assembling this day, and with whom I have the satisfaction of saying I had the honour of having some personal acquaintance. Gentlemen:—a more excellent and amiable man, in all the relations of life, I believe never existed. If he did not meet with all the personal consideration to which his great talents and great services may appear to have entitled him, I am satisfied it

was owing to the simplicity of his character, to the modesty of his nature, to the absence in him of every thing like presumption and ostentation; and to the unwillingness to obtrude himself, not only upon the great and powerful, but even on those branches of the scientific world to which he more immediately belonged. Gentlemen :—it is a satisfaction to me to be able to say so much from my own knowledge of the personal merits of Mr. Watt. His discoveries are known to the world, and I trust we live in an age too liberal not to feel that if those discoveries and that science are advantageous to mankind in general, this circumstance, so far from diminishing his merit in our eyes, must greatly increase it; but at the same time we need not be ashamed to say, that if the whole world does experience and is likely to experience the benefits of the discoveries of Mr. Watt,


they are particularly advantageous to the country which gave him birth. We can never doubt that by our wealth, by our capital, by the means which Providence has afforded us in being the country which has of the whole world the greatest command of fuel, we must always have advantages in the employment of the Steam Engine, which can belong to no other nation in an equal degree with ourselves. When, therefore, we hear stated the different effects it may have upon the operations of future war, we may be persuaded that whatever additional discovery, grounded on the Steam Engine, may be made elsewhere, whatever temporary advantages may be acquired by other powers, even if such should occur, we may rest assured that the permanent advantages of this great invention will be felt principally in England.

Gentlemen:—I will detain you no longer; but I cannot close without informing you that I am commanded by the King, to say that he is most deeply sensible of the merits of the individual whose services you are called upon this day to recognise, and that he is most anxious that there should not be any subscription in testimony of services like those of Mr. Watt in which his name should not appear. His Majesty has authorised me to put down five hundred pounds in his name.


SIR HUMPHRY DAVY.

I ought to apologise for rising so immediately to address this meeting, but as the distinguished person whose memory we have met together to honour, owes his claims to the gratitude of society to his scientific labours, and as he was one of the

most illustrious Fellows of that institution for the promotion of natural knowledge over which I have the honour to preside, I consider it as a duty incumbent on me to endeavour to set forth his peculiar and exalted merits, which live in therecollection of his contemporaries, and will transmit his name with immortal glory to posterity. Those who consider James Watt only as a great practical mechanic form a very erroneous idea of his character: he was equally distinguished as a natural philosopher and a chemist, and his inventions demonstrate his profound knowledge of those sciences, and that peculiar characteristic of genius, the union of them for practical application. The Steam Engine before his time was a rude machine, the result of simple experiments on the compression of the atmosphere, and the condensation of steam. Mr. Watt's



improvements were not produced by accidental circumstances or by a single ingenious thought; they were founded on delicate and refined experiments, connected with the discoveries of Dr. Black. He had to investigate the cause of the cold produced by evaporation, of the heat occasioned by the condensation of steam—to determine the source of the air appearing when water was acted upon by an exhausting power; the ratio of the volume of steam to its generating water, and the law by which the elasticity of steam increased with the temperature: labour, time, numerous and difficult experiments, were required for the ultimate result; and when his principle was obtained, the application of it to produce the movement of machinery demanded a new species of intellectual and experimental labour. He engaged in this with all the ardour that success inspires, and was obliged to bring



all the mechanical powers into play, and all the resources of his own fertile mind into exertion ; he had to convert rectilineal into rotatory motion, and to invent parallel motion. After years of intense labour, he obtained what he wished for : and at last, by the regulating centrifugal force of the *governor*, placed the machine entirely under the power of the mechanic, and gave perfection to a series of combinations unrivalled for the genius and sagacity displayed in their invention, and for the new power they have given to civilised man. Upon the nature of this power I can hardly venture to speak : so extensive and magnificent a subject demands a more accomplished and able orator. What is written on the monument of another illustrious and kindred philosopher, in relation to one great work, and a single spot, will apply to Watt in almost every part of the empire :—

“ Si monumentum requiris circumspice.”



And where can we cast our eyes, without seeing results dependent upon or connected with his inventions?—Look round the metropolis, our towns—even our villages, our dock-yards, and our manufactories; examine the subterraneous cavities below the surface, and the works above; contemplate our rivers and our canals, and the seas which surround our shores, and every where will be found records of the eternal benefits conferred on us by this great man. Our mines are drained, their products collected, the materials for our bridges raised, the piles for their foundations sunk, by the same power; machinery of every kind, which formerly required an immensity of human labour, is now easily moved by steam; and a force equal to that of five hundred men is commanded by an infant, whose single hand governs the grandest operations. The most laborious works,

such as the sawing of stones and wood, and raising of water, are effected by the same means which produce the most minute, ornamental, and elegant forms. The anchor is forged, the die is struck, the metal polished, the toy modelled, by this stupendous and universally applicable power: and the same giant arms twist the cable-rope, the protector of the largest ship of the line, and spin the gossamer-like threads which are to ornament female beauty. Not only have new arts and new resources been provided for civilised man by these grand results, but even the elements have to a certain extent been subdued and made subservient to his uses; and, by a kind of philosophical magic, the ship moves rapidly on the calm ocean, makes way against the most powerful stream, and secures her course, and reaches her destination, even though opposed by tide and storm.

The Archimedes of the ancient world by his mechanical inventions arrested the course of the Romans, and stayed for a time the downfall of his country. How much more has our modern Archimedes done? He has permanently elevated the strength and wealth of this great empire: and during the last long war, his inventions and their application were amongst the great means which enabled Britain to display power and resources so infinitely above what might have been expected from the numerical strength of her population. Archimedes valued principally abstract science; James Watt, on the contrary, brought every principle to some practical use; and, as it were, made science descend from heaven to earth. The great inventions of the Syracusan died with him—those of our philosopher live, and their utility and importance are daily more felt; they are among the grand re-

sults which place civilised above savage man—which secure the triumph of intellect, and exalt genius and moral force over mere brutal strength, courage, and numbers. The memory of James Watt will live as long as civilised society exists : but it surely becomes us, who have been improved by his labours—who have wondered at his talents, and respected his virtues, to offer some signal testimony of our admiration of this great man. This indeed cannot exalt his glory, but it may teach those who come after us, that we are not deficient in gratitude to so great and signal a benefactor : I therefore, my Lord, beg leave to move,—

“ That the late James Watt, by the
 “ profound science and original genius
 “ displayed in his admirable inventions,
 “ has more than any other man of this
 “ age exemplified the practical utility
 “ of knowledge, enlarged the power of

“ man over the external world, and
“ both multiplied and diffused the con-
“ veniences and enjoyments of human
“ life.”

MR. BOULTON.

My Lord :—I present myself to your notice, under the consciousness that though I shall occupy a small portion of the time of this meeting, I shall need a large share of their indulgence, in my endeavours to lay before them a few illustrations of the genius and character of the individual whose merits we are proposing to commemorate. Intimate as were my friendship and intercourse with Mr. Watt, through the whole of my life, and great as is my veneration of his unrivalled talents and merits, I am aware these considerations alone would not authorize me in asking any portion of the attention of the assembly I am now addressing: I am in-

duced to hope for it solely under the idea that my intimate acquaintance with the progressive introduction of the Steam Engine, and the application of it to our manufactures, may enable me to offer some observations connected with this view of the effects of Mr. Watt's great invention, not falling within the scope of the remarks of the distinguished President of the Royal Society. The philosophy and science of Mr. Watt's great and happy conception have placed him in the first rank of the philosophers of his day, and his merits in embodying the principles of his invention in a perfect practical form, so as to render them most conducive to the extension of the nation's wealth, power, and comforts, are inferior only in the next degree to his eminent scientific attainments. At the period of the construction of the first steam engine upon his principles at Soho, the intelligent and judicious Smeaton, who had

been invited to satisfy himself of the superior performance of the engine by his own experiments upon it, and had been convinced of its great superiority over Newcomen's, doubted the practicability of getting the different parts executed with the requisite precision; and augured, from the extreme difficulty of attaining this desideratum, that this powerful machine, in its improved form, would never be generally introduced. Such was at that period the low state of the mechanic arts as fully to justify his opinion; but a school of workmen in every relevant branch was speedily and successfully instituted, and the forms and construction of the machine were perfected with a skill and accuracy till then unknown in the execution of large machinery. A convenient and efficient instrument was formed, competent to give to

every branch of manufacture the fullest development ; and with the contemporary improvements of an Arkwright, a Wedgewood, and of many other distinguished manufacturers, several of whom are now before me, assembled to do honour to kindred genius and talents, arose a power, at once economical, regular, manageable, and almost of illimited force ; in a word, an agent fitted in all respects to co-operate with the skill and enterprise of these distinguished men. The most effectual adaptation of this machine to the various operations of our diversified manufacturing establishments was studied and accomplished ; and what is now almost matter of routine, was for a succession of years attained by the continued efforts of a deeply reflecting mind, and by a series of ingenious experiments and researches through-

out the whole scope of British Manufacture. In this investigation, Mr. Watt had the co-operation of some highly enlightened colleagues, to whose merit and exertions he has paid a just tribute in his Report on the Steam Engine. It however is but justice to say, that his comprehensive mind embraced with like success the minutest details and the application of the most abstruse science. A power equal to that which would require the maintenance of one hundred thousand horses has been furnished from the single establishment to which Mr. Watt belonged; and assuming that power to be exercised during three hundred days in the course of the year, the saving arising from the substitution of steam power in lieu of the exertions of the animals themselves, would not be less than three millions of pounds sterling per annum. Extending this cal-

culatation to the whole of the steam power produced and used throughout the kingdom, we shall be supplied with a clear indication to one of the sources of power and wealth which have supported this nation through its late arduous struggle, and which have accelerated the renovation of its impaired energies with a celerity exciting surprise in every reflecting mind. A corroborative inference will be derived from a comparison of the present and former states of some of the leading branches of our manufactures. The rapid extension of the cotton-trade has justly been observed, by the first authorities, to be unparalleled in the commercial annals of any country. Iron, of which we were large importers not many years since, is now extensively exported ; and while the cotton products of steam power are carried with advantage

to the original site of this manufacture in India, iron made by the same power, if unshackled by commercial restrictions, might be placed on the quays of Petersburg in successful competition with that of Siberia. I am not therefore, I think, incorrect in concluding that the fortunate completion and introduction of this useful and powerful instrument, in conjunction with the contemporary efforts and talents of many of our distinguished manufacturers, encouraged and animated as they are by the enlightened policy of our Government, have produced an era in our manufactures and trade unexampled in any state or age, and one that will confer a conspicuous distinction on this country in the history of empires. I am not either, I trust, ascribing an undue share of this prosperity and pre-eminence to the genius and merits of my

late friend, Mr. Watt; and though I cannot divest myself of partiality for the memory of an individual, with whom I know it was esteemed by my father one of the highest distinctions of his life to have been associated; and the inheritor of this sentiment, if possible, still more deeply impressed, I anxiously hope I shall not be deemed to have been improperly influenced by this feeling in seconding the resolution moved by the learned President of the Royal Society.

MR. HUSKISSON.

My Lord :—a task has been assigned to me at this meeting, which, I am fully aware, would have been far more ably and successfully executed by some one of those, who have done me the honour to put into my hands the resolution with which I shall conclude. Several of those

gentlemen had an advantage, which I cannot boast, that of having been personally acquainted with the late Mr. Watt, of having enjoyed his confidence and friendship, and of having observed, more nearly than myself, the application and progress of those wonderful discoveries, and scientific inventions, by which he has so greatly benefited his country and the world.

But, gentlemen, however ill qualified I may be fully to appreciate the merits of Mr. Watt, however inadequate I feel myself to do justice to my own sentiments in this respect, I cannot but be gratified that I have a public opportunity to bear my humble acknowledgment of gratitude for his services, and of respect for his memory.

Gentlemen :—whether, abstracting ourselves for a moment from all considera-

tions of country, we look as men to the benefits which Mr. Watt's inventions have imparted, and are still imparting, to the whole race of man ; or whether, as members of that great and powerful community of which he was a member, we confine ourselves to contemplate the special benefits which he conferred upon this country,—his great discoveries must stand equally entitled to our highest admiration. As Englishmen, we cannot behold the results produced by his genius, without a lively sense of joy that we belong to the same country to which he belonged, and without an individual feeling of gratitude that he lived at a time which allows us all to participate in the benefits which he was the selected instrument, under Providence, of introducing among mankind.

If, gentlemen, there be any individual

•

who can doubt whether Mr. Watt be entitled to rank in the first class of the benefactors of mankind, that individual, let him belong to what station of society he may, has, I think, not justly estimated the influence of improvements in physical and chemical science upon the moral condition of society. I apprehend no man can doubt the beneficial effect of that influence, more or less, in all civilized countries. But, in my view of the subject, there is no portion of the globe, however remote, where the name and flag of England are known, where commerce has carried her sails, and begun to introduce the arts of civilization, which does not derive some advantage from Mr. Watt's discoveries. The economy and abridgment of labour, the perfection and rapidity of manufacture, the cheap and almost indefinite multiplication of every article which suits the

luxury, the convenience, or the wants of mankind, are all so many means of creating, in men even but little advanced from the savage state, a taste for improvement; of raising in their bosoms a feeling of new wants and new desires; of showing them the possibility of satisfying those wants and those desires; and thereby of calling into action the most powerful stimulant, and steady motive, to advancement in the scale of the civilized world. Are not the remote islands of the Pacific Ocean become a happy proof of the truth of this position? The same race which, less than half a century ago, murdered and devoured our intrepid but unfortunate navigator, Captain Cook, have, within that short period, become acquainted with many of the comforts of life, and made a greater progress, perhaps, towards improvement, than remains for them to make, in order to entitle themselves to

be admitted into the rank of civilized nations. Much of this happy change may, I grant, be ascribed to the benevolent and indefatigable exertions of the ministers of Christianity; but if these islanders be now clothed in the productions of English industry,—if they have adopted our woollens and our linens, instead of their own rude dress (or rather no dress),—if in their habitations are to be found many useful articles of English manufacture, instead of their own barbarous utensils,—let it not be supposed that the increased facility of supplying their wants has not been one powerful means of exciting their desire to procure these enjoyments. If the Steam Engine be the most powerful instrument in the hands of man, to alter the face of the physical world, it operates, at the same time, as a powerful moral lever in forwarding the great cause of civilization. We

cannot, therefore, recall to our recollection the invention of the Steam Engine, and follow ~~that~~ invention through all its consequences, without feeling the beneficial influence of this discovery upon all nations, from those most advanced, to those ~~which~~ have made the least progress, in the arts and refinements of life.

The benefits which this discovery has conferred upon our own country, as they are more extensive, are also more obvious. If this were the proper place, and if I were not afraid of trespassing too long upon your time, I could trace those benefits in their detailed progress and operation. I could show how much they have contributed not only to advance personal comfort and public wealth, by affording to industrious millions the facility of providing for their individual wants, by means which directly conduce to the general power and greatness

of the state, but also to the general diffusion of a spirit of improvement, a thirst for instruction, and an emulation to apply it to purposes of practical utility, even in the humblest classes of the community. But it cannot be necessary to enter upon so wide a range with the enlightened meeting which I have now the honour of addressing. Looking back, however, to the demands which were made upon the resources of this country during the late war, perhaps it is not too much to say, at least it is my opinion, that those resources might have failed us, before that war was brought to a safe and glorious conclusion, but for the creations of Mr. Watt, and of others moving in the same career, by whose discoveries those resources were so greatly multiplied and increased. It is, perhaps, not too much to say, that, but for the vast accession thus

imperceptibly made to the general wealth of ~~this~~ empire, we might have been driven to sue for peace, before, in the march and progress of events, Nelson had put forth the last energies of his naval genius at ~~Tr~~algar, or, at any rate, before Wellington had put the final seal to the security of Europe at Waterloo. If, therefore, we are now met to consider of placing a monument to the memory of Mr. Watt beside the monuments of those who fell in the splendid victories of the last war, let it not be said that there is no connexion between the services of this modest and unobtrusive benefactor of his country, and the triumphs of the heroes which those monuments are destined to commemorate.

I own that the monument about to be proposed to Mr. Watt appears to me to

be one of those acts of public duty, to which every Englishman of a cultivated mind, following the munificent example of the sovereign, should be anxious to contribute. In doing so, he will indulge not only a feeling of gratitude, but the cheering hope of exciting a spirit of emulation in others ; and an honest pride, in reflecting that he belongs to the same community of which this highly-gifted genius was a member, and to the age in which he lived.

Long as I have already detained the meeting, I cannot sit down without adding one or two short remarks. It has been often said, that many of the great discoveries in science are due to accident ; but it was well remarked by the President of the Royal Society, that this cannot be the case with the principal discovery of Mr. Watt. Long and scientific research and

application alone could have enabled him to create his Steam Engine. Again, it has frequently happened that those philosophers, who have made brilliant and useful discoveries, by watching the phenomena of the physical world, the combinations of chemistry, or the mysterious workings of organic life, have only been able to turn their discoveries to the purpose of averting evils threatening, and often destroying, the precarious tenure of human existence. Thus Franklin disarmed the thunderbolt, and conducted it innocuous through our buildings, and close to our fire-sides—thus Jenner stripped a loathsome and destructive disease of its virulence, and rendered it harmless of devastation—thus the present President of the Royal Society (of whom it is difficult to say whether abstract science or practical life has been most benefited by his discoveries) sent the safety lamp into

•

our mines to save (as its name implies) their useful inhabitants from the awful explosion of the fire-damp. But the discovery of Mr. Watt went further ; he subdued and regulated the most terrific power in the universe ; that power which, by the joint operation of pressure and heat, probably produces those tremendous convulsions of the earth, which in a moment subvert whole cities, and almost change the face of the inhabited globe. This apparently ungovernable power Mr. Watt brought into a state of such perfect organization and discipline (if I may use the expression), that it may now be safely manœuvred and brought into irresistible action—irresistible, but still regulated, measured, and ascertained—or lulled into the most complete and secure repose, at the will of man, and under the guidance of his feeble hand. Thus one

man directs it into the bowels of the earth, to tear asunder its very elements, and bring to light its hidden treasures ; another places it upon the surface of the waters, to control the winds of heaven, to stem the tides, to check the currents, and defy the waves of the ocean ;—a third, perhaps, and a fourth, are destined to apply this mighty power to other purposes, still unthought-of and unsuspected, but leading to consequences, possibly, not less important than those which it has already produced.

It is, gentlemen, in the contemplation of the wonderful, but most beneficial change which this single invention has already effected in the world,—in the anticipation of the still further changes which it may effect, that I feel most forcibly my own want of power to do justice to my sentiments on this occasion, and that I gladly

relieve myself from any further prosecution of the attempt by proposing to you the following Resolution :

“ That those benefits, conferred by Mr. Watt on the whole civilised world, have been most experienced by his own country, which owes a tribute of national gratitude to a man who has thus honoured her by his genius, and promoted her well-being by his discoveries.”

SIR JAMES MACKINTOSH.

Lord Liverpool, and gentlemen:—I rise to perform the duty which has been allotted to me in seconding the resolution which has just been proposed. I am perfectly aware how needless it is for me to address you after what you have heard from persons of whom each had some peculiar claim on your attention. But even if I could be silent without disrespect to

you, I will own that I should find it difficult to decline what I consider as so high an honour as that of taking a part in the present proceeding.

The character of Mr. Watt has already been presented to you in a double point of view. Had he been only a discoverer in science, his name would have been immortal in the annals of philosophy. Had he been only a fortunate inventor in the useful arts, his name would have marked an epoch in the progress of ingenious industry. But when we consider him as combining both these characters; when we consider him as a great discoverer, who applied the results of his own philosophical discoveries to the purposes of human life, so as to convert an obscure and neglected engine into a power which has beneficially changed the face of the world, I think I may safely join my voice

to those more powerful voices which have preceded me, in affirming, that no man ever had a more evident claim to be honoured by his country, and revered by all generations.

The debt of science has been eloquently paid by the President of the Royal Society. No man now living is so well entitled to appreciate great discoveries ; and no man's presence can more strongly remind others of the honours, and (if need be) of the rewards which are due to those who apply their great discoveries to the immediate service of their country. The debt of the state has been becomingly paid by the ministers of the crown, who have truly told you that those vast inventions which are in due time to become the property of all mankind, served in the first instance to multiply the resources of our own country, to

arm her with new strength, to enable her to sustain more arduous and perilous contests than any in which she had been before plunged, and to rouse the energy and talent of others who were excited by the genius of Watt, to follow, though at a distance, in the footsteps of their master.

The President of the Board of Trade has justly and happily described the moral power of these physical discoveries ; their effect, not only in spreading among the humblest classes of civilised communities what were formerly the ornaments and luxuries of the rich, but in benefiting those savage tribes who seem at first sight beyond the reach of those benefits conferred on civilised men, by presenting new gratifications to them, accessible even to their poverty ; by awakening new desires, inspiring new faculties, and insensibly, as it

were, tempting them into a career of improvement from which they appeared to be for ever debarred.

It may be presumptuous in me to add any thing in my own words to such just and exalted praise. Let me rather borrow the language in which the great father of modern philosophy, Lord Bacon himself, has spoken of inventors in the arts of life. In a beautiful though not very generally read fragment of his, called the New Atlantis, a voyage to an imaginary island, he has imagined an university, or rather royal society, under the name of Solomon's House, or the College of the Six Days' Works; and among the various buildings appropriated to this institution, he describes a gallery destined to contain the statues of inventors. He does not disdain to place in it not only the inventor of one of the greatest instruments of science, but the

discoverer of the use of the silkworm, and of other still more humble contrivances for the comfort of man.—What place would Lord Bacon have assigned in such a gallery to the statue of Mr. Watt? Is it too much to say, that, considering the magnitude of the discoveries, the genius and science necessary to make them, and the benefits arising from them to the world, that statue must have been placed at the head of those of all inventors in all ages and nations! In another part of his writings, the same great man illustrates the dignity of useful inventions by one of those happy allusions to the beautiful mythology of the ancients, which he often employs to illuminate as well as to decorate reason. “The dignity,” says he, “of this endowment of man’s life with new commodity appeareth, by the estimation that antiquity made of such as guided thereunto; for

whereas founders of states, lawgivers, extirpators of tyrants, fathers of the people, were honoured but with the titles of demi-gods, inventors were ever consecrated amongst the gods themselves*."

It has been justly observed, that no invention equally great and useful ever sprung so much from the science of the inventor as the application of the power of steam. It is, doubtless, this peculiarity

* The sequel of this passage is singularly applicable to the nature of Mr. Watt's service:—"And if the ordinary ambitions of men lead them to seek the amplifications of their own powers in their countries, and a better ambition hath moved men to seek the amplification of the power of their own countries amongst other nations; better again and more worthy must that aspiring be which seeketh the amplification of the power and kingdom of mankind over the world; the rather because the other two prosecutions are ever culpable of much perturbation and injustice: but this is a work truly divine, which cometh *in aura leni* without noise or observation."—Fragments of Valerius Terminus, on the Interpretation of Nature.

which exalts the name of Mr. Watt above most of those who went before him. But it may be considered from a higher point of view, as marking the advancement of the human mind, and justifying hopes of its farther progress. The improvements, great and valuable as they are, which have owed their origin to fortunate circumstances and to the unscientific sagacity and ingenuity of individuals, are irregularly scattered over a long series of ages. It is impossible to reduce their progress to any definite and precise laws—you cannot foretell with certainty that one discovery will soon be followed by others: at most, you can only trace a faint outline of the general advances of mankind. But it is otherwise with scientific discoveries; they show that knowledge has reached that period of maturity when she becomes fruitful. Every such discovery is the parent

of future discoveries;—every advance so made gives us a clearer view of the remainder of the road, and we may venture in some degree to conjecture what is to come, by looking back on what has been. Sixty years only (how short a period in the history of philosophical invention!)—sixty years only have passed since the great discovery of Watt. Scarce forty years have elapsed since it has been reduced to practice on an extensive scale. You have heard from a gentleman *, in whose presence it is delightful to take a part in this national homage, the mighty effects which it has produced in that little time. It has been calculated by a most ingenious foreigner (M. Dupin), that the power of the Steam Engines in England alone, which are managed by thirty-six thousand men, would have been sufficient in eighteen

* Mr. Boulton.

hours to raise the great pyramid of Egypt, which is said to have cost the labour of one hundred thousand men for twenty years. If we survey the face of the globe, we see the same discovery every where ;—wherever we turn our eyes, from the Missouri to the Ganges, the earth is already covered with monuments of the genius of Watt. The summits of the Andes are crossed by his machines ;—the mines of Mexico are about to yield a more abundant produce under the mighty action of the power which he has revealed. The seas and rivers swarm with those new vessels which we owe also to his genius, for it was he who rendered it possible to apply steam with advantage to navigation. It was but the other day I heard that the vast rivers of South America are to be navigated by Steam Vessels, and that the savages, who crawl in the marshy forests of

Guiana, will soon be roused to a sort of stupid amazement by the sight of vessels making their way against the stream of the Orinoco, without any visible impulse from nature or from human labour.

If such has been the result of a single discovery in sixty, or rather in forty years, what may not sanguine hope whisper to itself of the probability of approaching improvements? Had any man predicted in 1784 what we have seen accomplished by the genius of Watt, his prophecy would have appeared more extravagant than the most brilliant visions of futurity in which we could now indulge. In contemplating such glorious victories of intellect over Nature, I own I sometimes venture to cherish trembling hopes of physical and even moral improvements, which I should not dare to expose to the eye of the scorner. I cannot but believe that glorious things

yet lie hidden in the unopened volumes of the destinies of man.—Let me add, that the alliance of philosophy with the useful arts is not only of great value to society, but in more than one respect of the utmost importance to science itself. The President of the Royal Society will allow me to say, that every manufactory may thus become in some degree a school of experimental philosophy. No experiments are so decisive as those processes, which being performed for personal advantage, can only be continued while they are successful. There are no other means of showing the palpable utility of knowledge to the most ignorant, and of rendering it respectable to the grossest and rudest of men. Thus it becomes popular; it is spread through a greater number of understandings; it visits minds which, though doubtless possessing their proportion of acute-

ness and vigour, would not otherwise have been lifted above the most vulgar concerns of mere animal existence. The chances of the advancement of science are increased in proportion to the additional number of intellects engaged in its cultivation. The collective understanding of mankind is invigorated, their talents are excited by competition and collision, and their minds are elevated by a glimpse, however imperfect, of higher objects. These reflections were very strongly impressed on my mind when in company with my learned friend near me *, I lately went to visit the Mechanics' Institution—a species of establishment first founded at Glasgow, by Dr. Birkbeck, and lately introduced into the capital by the same very meritorious person. I was present at a lecture delivered there to eight hundred working mechanics, on the

* Mr. Brougham.

laws of attraction ; a subject, apparently, (though only in appearance) far remote from their occupations. Their appearance exhibited all the sobriety, cleanliness, and comfort, which are the happy marks of contented industry ; and they listened with as much intense attention and evident intelligence as could be shown by an audience of philosophers. When the lecturer came to explain the important law according to which the force of attraction decreases in proportion to the squares of the distances, the interest of the audience seemed to become stronger, until when he had at length completed his illustrations as well as his proofs, an unanimous plaudit burst forth from the delighted audience,—the pure fruit of pleasure, in seeing the new truth then for the first time revealed to their understandings. A more intellectual plaudit never arose from any as-

sembly of men—it was an applause worthy of reasonable beings, for it could only have arisen from the comprehension of a new and sublime truth. If it had not been perfectly understood it could have given no pleasure. I was struck and even affected by the consideration, that within a century of the death of Newton, in the capital which he honoured by his residence, his most sublime discoveries could be thus rendered intelligible and delightful to eight hundred working mechanics. I could not look on that body of men without reflecting on the importance of casting the seeds of knowledge into their minds, and how much these new votaries of science may contribute to strengthen and enrich their country, while they spread improvement and enjoyment over the world. Every principle disclosed to them, every accession to their knowledge, every stimulant

applied to their faculties, may produce consequences yet unimagined, in the solitudes of New Holland, or even in the unexplored deserts of Africa.

We have survived a prejudice prevalent among speculative men, though in itself shallow and vulgar, that knowledge loses some part of its dignity when it becomes directly useful ; and we are now convinced with Bacon (who was assuredly not influenced by any defect of fancy or elevation), that science is ennobled, not degraded, by bringing forth a numerous progeny of useful arts. We have survived, also, another prejudice equally vulgar, though of an opposite kind, which induces some to undervalue the elegant arts, as if they also were not useful. We may continue to distinguish between the fine arts and the useful arts, but we must not oppose them. It is as absurd to question

the genius of Watt, as to doubt the usefulness of Chantrey and Lawrence. The fine arts must always be useful. The useful arts may often exhibit the same beauty and greatness which are displayed in the fine. Wherever an original mind produces new combinations of thought and feeling, whether its means be words or colours, or marble or sound, or command over the mighty agents of Nature; whether the result be an epic poem, or a statue, or a Steam Engine, we must equally reverence those transcendent faculties to which we give the name of genius.

I rejoice at seeing here, on this occasion, some of the friends and companions of Mr. Watt, and many of that enlightened, ingenious, independent, and upright class of men, the manufacturers of England; who will consider this meeting as a public solemnity in honour of the useful arts, as

a just honour paid to their respectable body, in the person of him who was indisputably at their head. The descendants of Wedgewood, and Arkwright, and Rennie, cannot behold with indifference the honours paid to the memory of Watt. In reflecting on the qualities which are often common to the fine and useful arts, I feel pleasure that the proposal to honour the memory of this great man should be made in the year in which a gallery of paintings is for the first time opened in this greatest of cities, not for the splendour of monarchy or the dignity of aristocracy, but for the cultivation and gratification of the whole people of England. I also draw a happy augury for our success from the circumstance that our design is undertaken at the moment when we have seen the genius of Chantrey draw forth from marble the lineaments of wis-

dom and benignity which once marked the living countenance of Watt.

MR. BROUGHAM.

My Lord and Gentlemen :—I cannot but feel, in common with those who have addressed you, the honour of being permitted to take a part in these proceedings, by proposing a resolution, which has for its purpose, to embody in a practical form the sentiments entertained, I trust unanimously, by this meeting. I presume that I owe this distinction to the circumstance of having been a humble, though a zealous promoter, in conjunction with a worthy and learned friend of mine (Dr. Birkbeck), whom I saw a little while ago in this place, of the institution alluded to by my honourable friend who preceded me, the object of which is to bring science within the

reach of the humblest artisan in this country, and the effect of which in all probability will be, to draw forth many a man of genius from the most numerous and important class of society, to follow in the footsteps of him whose name, once obscure, now shines forth with so brilliant and so useful a lustre.

But there is another ground upon which I presume to address this meeting. I had the happiness of knowing Mr. Watt for many years, in the intercourse of private life; and I will take upon me to bear a testimony, in which all who had that gratification I am sure will join, that they who only knew his public merit, prodigious as that was, knew but half his worth. Those who were admitted to his society will readily allow that any thing more pure, more candid, more simple, more scru-

pulously loving of justice, than the whole habits of his life and conversation proved him to be, was never known in society. One of the most astonishing circumstances in this truly great man, was the versatility of his talents. His accomplishments were so various, the powers of his mind were so vast, and yet of such universal application, that it was hard to say whether we should most admire the extraordinary grasp of his understanding, or the accuracy of nice research with which he could bring it to bear upon the most minute objects of investigation. I forget of whom it was said, that his mind resembled the trunk of an elephant, which can pick up straws and tear up trees by the roots. Mr. Watt in some sort resembled the greatest and most celebrated of his own inventions; of which we are at a loss whether most to wonder at the power of grappling

with the mightiest objects, or of handling the most minute ; so that while nothing seems too large for its grasp, nothing seems too small for the delicacy of its touch ; which can cleave rocks and pour forth rivers from the bowels of the earth, and with perfect exactness, though not with greater ease, fashion the head of a pin, or strike the impress of some curious die. Now those who knew Mr. Watt, had to contemplate a man whose genius could create such an engine, and indulge in the most abstruse speculations of philosophy, and could at once pass from the most sublime researches of geology and physical astronomy, the formation of our globe, and the structure of the universe, to the manufacture of a needle or a nail ; who could discuss in the same conversation, and with equal accuracy, if not with the same consummate skill, the most for-

bidding details of art, and the elegances of classical literature ; the most abstruse branches of science, and the niceties of verbal criticism.

There was one quality in Mr. Watt which most honourably distinguished him from too many inventors, and was worthy of all imitation ; he was not only entirely free from jealousy, but he exercised a careful and scrupulous self-denial, and was anxious not to appear, even by accident, as appropriating to himself that which he thought belonged in part to others. I have heard him refuse the honour universally ascribed to him, of being the inventor of the Steam Engine, and call himself simply its improver ; though, in my mind, to doubt his right to that honour would be as inaccurate as to question Sir Isaac Newton's claim to his greatest discoveries, because Des Cartes in mathe-

matics, and Galileo in astronomy and mechanics, had preceded him ; or to deny the merits of his illustrious successor, because galvanism was not his discovery, though before his time it had remained as useless to science as the instrument called a Steam Engine was to the arts before Mr. Watt. The only jealousy I have known him betray was with respect to others, in the nice adjustment he was fond of giving to the claims of inventors. Justly prizing scientific discovery above all other possessions, he deemed the title to it so sacred, that you might hear him arguing by the hour to settle disputed rights ; and if you ever perceived his temper ruffled, it was when one man's invention was claimed by, or given to, another ; or when a clumsy adulation pressed upon himself that which he knew to be not his own.

It is fit that we should now act in this spirit of justice towards him, and discharge as far as we can our debt of gratitude, by erecting a monument to his memory.—To perpetuate his name, indeed, there needs no monument of perishable materials; it will be as lasting as that element which he subdued to the use of man; but at least, by consecrating his renown in the eyes of the people, we may hold forth his example to others in that rank of life from which his genius taught him to rise, and demonstrate that a man of talent in humble life cannot more certainly command the gratitude of his country than by devoting himself to pursuits which tend towards the common benefit of mankind. And I think I may add in reference to the last part of the resolution, with which I am about to conclude, that this memorial of our admiration cannot be more fitly

placed than within walls raised to that religion which teaches universal peace, and with a peculiar care cherishes the rights of the poor. If in old times the temples of false gods were appropriately filled with the images of men who had carried devastation over the face of the world, surely our temples cannot be more worthily adorned than with the likenesses of those whose triumphs have been splendid indeed, but unattended by sorrow to any; who have achieved victories, not for one country only, but to enlarge the power and increase the happiness of the whole human race:—I move,

“ That a monument be erected to the
 “ memory of the late Mr. Watt in the
 “ Cathedral Church of Saint Paul, or in
 “ the Collegiate Church of Saint Peter,
 “ Westminster, and that a subscription
 “ for that purpose be forthwith opened.”

MR. LITTLETON.

My Lord Liverpool and Gentlemen :—You will easily give me credit when I assure you that it is with extreme diffidence I offer myself to your attention after the gentlemen you have heard this day ; but still so great is my admiration of Mr. Watt's talents and character, that I cannot deny myself the satisfaction of occupying your time a few moments while I second the resolution which you have just heard put. For certain I am, that among those records of individual distinction and of national fame contained in that sanctuary which has been referred to in the resolution, there will be none, the justice and propriety of which the English public and the whole world will more willingly acknowledge, none that will be inscribed with a name to which Englishmen, in the natural spirit of national rivalry and

pride will more fondly point, than to that which shall bear upon it the name of Watt; for never, hitherto, has there existed a country in the world that could boast of having given birth to a man, who, by the sole force of his own philosophic genius, has conferred such benefit, not only upon his own country, but upon mankind at large, as have resulted from the inventions of Mr. Watt. Although the grand invention of the separate condenser in the Steam Engine may be dated so far back as sixty years ago, yet it was not till the year 1784 that its adaptation to rotatory machinery was perfected; and it is from that period we may trace all the great results that have followed to our country and to the world.

I have been anxious to procure some data on which to form an estimate of the probable number and power of the Steam

Engines in this island ; and I am assured that the data upon which M. Dupin has founded his calculations are nearly accurate. It is stated by him, that the amount or number of Steam Engines in England is somewhere about ten thousand. Taking these on an average to be equal to twenty-horse power each, we have 200,000 horses acting together for the total force employed in manufactories, mines, &c. during a period of from ten to twenty-two hours in each day. There must be at least from two to two and a half sets of horses kept to perform a work of this description, which would raise the total number equivalent to the ten thousand Steam Engines to from *four to five hundred thousand horses!* The difference of cost between the coals consumed by these engines and the keep, &c. of the above number of horses, would amount to *above fifteen millions of pounds*

sterling annually. And if this calculation was carried farther, so as to set before you an idea of the annual saving in human labour through the medium of these 10,000 Steam Engines, the result would be so prodigious as to be hardly credible to any one. My lord, as the representative of that county which witnessed the earliest and most extensive application of Mr. Watt's invention, it has frequently occurred to me to reflect on the prodigious change which, in a few years, almost within my own memory, has been wrought on the face of that country. By the agency of Mr. Watt's inventions, minerals have been raised with a facility and in an abundance adequate to the supply of every part of the world ; by the power of Mr. Watt's mind, lands which had lain waste, or were occupied by a solitary tenantry, have been covered with towns, daily ex-

tending their limits, and uniting with each other, and the whole face of the country is seen glowing with industry, intelligence, and wealth. Surely, then, it is due that we should take some public step to record our gratitude for such services. Had Mr. Watt been living, such a measure, gentlemen, would have been unnecessary. You have heard from those who had the happiness of his personal acquaintance, that in his manner and habits of life he was one of the simplest of men. Equally devoid of ostentation and of jealousy, he was in all the affections of the heart one of the kindest and most philanthropic of his kind. He ambitioned no other monument than that which his own genius had created. He aimed at no other reward than the consciousness that no man in former times had promoted to an equal extent the wealth

and power of his country, or contributed so largely to improve the condition of his fellow-men. But we have a duty to discharge. We owe it to his son, to his relatives, to his friends, above all, we owe it to ourselves, that we should unite in recording our sense of the inestimable value of the benefits we have received from him. It is incumbent upon us as a nation to proclaim to the world that it is in the production of such characters that we place our chief pride. I beg leave, my Lord, to second the Resolution.

THE RIGHT HON. MR. SECRETARY PEEL.

Although, gentlemen, no one feels more strongly than I do, that so far as human intellect can do justice to the merits of Mr. Watt, that that justice has been

done, and that it is perfectly hopeless in any one, and perhaps presumptuous, to attempt to add to what has fallen from those who have addressed this assembly, yet, I trust, from the peculiarity of my situation, I may be heard for a few moments. I say the peculiarity of my situation, because I differ from those who have preceded me in this respect,—that I belong to that very numerous class of persons who have derived a direct personal benefit from the important discoveries of Mr. Watt. Gentlemen, I am one of those who derive all that they possess of worldly prosperity from the honest industry of others; and that man must have a base and ungenerous mind who upon such an occasion as this (such an awful and affecting occasion), could refuse to acknowledge his origin and his obliga-

tions with any other feelings than those of satisfaction and pride.

The branch of industry of which I am particularly speaking, is that fruitful source of our national wealth—the cotton manufacture of this country.

That manufacture, important as it was before, received new life and spirit from the discoveries of Mr. Watt.

I believe that it was in the year 1790 that the first Steam Engine, which applied a rotative power to machinery, was erected in the town of Manchester.

Before that period, the cotton manufacture had been chiefly carried on in remote and, comparatively speaking, inaccessible places.

It was dependent for its support either upon animal power, or upon unassisted nature ; but the inventions of Mr. Watt

gave it an energy which effected a complete revolution in the trade. It was transferred from wild and thinly inhabited districts to the centre of population and industry. Each branch of the trade, which before had been separately carried on, is now brought together ; and so perfect is the combination, that I understand it is possible to see within the same room, and in an inconceivably short space of time, every process conducted, by which the raw produce is transformed into the most beautiful fabric that adorns the female form.

When I recollect what has taken place in that county since the year 1790, in the short space of thirty years—when I look at the individual fortunes that have been made—the new towns that have sprung into existence—the thousands of human beings that have been born, who, but for the discoveries of Mr. Watt, would never

have seen the light, I am lost in admiration, not so much of the powers of mind of Mr. Watt, as of the dignity of human nature, which is ennobled by discoveries like these, that give subsistence and dispense comfort to thousands, while they widen the limits and add to the strength of the empire.

It is, therefore, my Lord, with the most heartfelt satisfaction that I give my warmest support to the proposition for erecting a Monument to the memory of so great a man. I feel an obligation to him from higher considerations, than those of the wealth to which he may have contributed. I feel the class of society from which I derive my origin exalted and honoured, by possessing such a man among its ranks.

I hope the result of this meeting will be even to improve upon that suggestion of

Lord Bacon, which has been noticed by Sir James Mackintosh.

I hope that, to inventors like Mr. Watt, we shall have no separate gallery appropriated in which we may perpetuate their fame ; but that the same dome which now covers the monuments of the warrior, and of the poet, and of the statesman, of those whom I must consider *concordes animæ*, will protect also the memorials which a grateful nation may raise to the men who have perfected the arts of civilised life, and have thus done lasting honour to their country.

The Resolution was then put by the noble Chairman, and carried unanimously.

THE EARL OF ABERDEEN.

My Lord and Gentlemen: In moving this Resolution, which has been placed in my hands, it would ill become

me to attempt to add to the eulogy which you have already heard on the distinguished individual whose genius and talents we have met this day to acknowledge. That eulogy has been pronounced by those whose praises are well calculated to confer honour, even upon him whose name does honour to his country. I feel in common with them, although I can but ill express that intense admiration which the bare recollection of those discoveries must excite, which have rendered us familiar with a power before nearly unknown, and which have taught us to wield, almost at will, perhaps the mightiest instrument ever intrusted to the hands of man. I feel, too, that in erecting a Monument to his memory, placed, as it may be, among the memorials of kings, and heroes, and statesmen, and philosophers, that it will be then in its proper place ; and most in its proper

place, if in the midst of those who have been most distinguished by their usefulness to mankind, and by the spotless integrity of their lives.

Gentlemen, it is obvious that, in order to carry your intentions into full effect, it will be necessary to commit the management of this work to persons qualified, by their acquirements and knowledge, to superintend its execution in such a manner as may do justice to your enthusiasm and to the object in view. I beg therefore to move,

“ That a Committee (of which you will hear the names hereafter) be appointed for this purpose.”

MR. FRANKLAND LEWIS.

I am aware that the honour of being called upon to second this resolution has been conferred upon me for no other reason than because I had the good fortune

to be acquainted with Mr. Watt in private life. I rise therefore under impressions, which I am sure must be deeply felt by all those around me who were his personal friends, and which incline me rather to express the delight and satisfaction with which I have listened to the just eulogies which have been pronounced upon his name, than to attempt to add to them by any feeble words of my own. It would indeed be a gratifying duty to dwell on his excellent qualities, and the benefits which he has conferred on mankind ; and if I could at this moment be induced to do so, I might be encouraged in the attempt by the recollection of the peculiar mildness of manner and benevolence of disposition which distinguished that lamented individual, and prevented persons of inferior capacities from being overwhelmed in their communications with him, by the extent of his knowledge and

the superiority of his mind. There is nothing more true in what has been said of him to-day than that they who have looked at Mr. Watt only in the light of a philosopher and an inventor, know in reality but a small portion of the worth and excellence with which he was adorned: amongst other qualities, he was distinguished by an intense power of thought, which was alike upon all the various subjects to which his extended studies and cultivated taste were constantly applying it. I perceive, however, that I am falling into needless repetition, and will content myself with bearing my testimony to the perfect accuracy of that admirable record of his character for which we are indebted to the pen of Mr. Jeffrey. It must to many persons have appeared to be a flattering eulogy; it is, in fact, no more than a plain unexaggerated statement.

With this consciousness of Mr. Watt's merits, and of the benefits he had conferred on mankind, it had occurred to many persons towards the close of his life, that the public had been slow in acknowledging the services he had rendered ; and I myself, in common with others, more than once openly expressed my wishes that some mark of public gratitude might be bestowed on him in his lifetime. That this object was not effected is attributable rather to the circumstances of the times than to a tardiness in recognizing Mr. Watt's services. It must not be forgotten, that Mr. Watt did not long survive that protracted and eventful contest in which this country was for so many years engaged with the disturber of the peace of Europe ; and whilst that contest lasted, the attention of the public was directed, and its honours chiefly bestowed, on those who

were struggling, at the hazard of their lives, to extend the glory and to secure the liberties of their country. That contest, however, has been fortunately closed. Our attention is now turned to pacific objects, and in contemplating the gratifying spectacle which this country now affords ; its peaceful, orderly, and hourly increasing industry, the effects and example of which are felt in the remotest corners of the habitable globe :—who is there who does not see, that for the power which sets all this in motion we are indebted to the discoveries of Watt? It is to this period, therefore, and to the present circumstances of the country, that the due estimation of his services must necessarily belong.

The Committee, whose names are about to be read, will have the grateful task of preparing a Monument which may, if possible, be worthy of his fame. They will, no

doubt, succeed in executing a work alike honourable to the feelings and creditable to the taste of the country. It will, however, be rather a testimony of our admiration, and a tribute of our gratitude, than a means of prolonging his memory: the hands of man cannot construct a monument so durable as the name of Watt.

LORD LIVERPOOL.

Before proposing this Resolution, I wish to state that I hold in my hand a letter from Mr. Canning, in which that right honourable gentleman regrets that he is unable to attend, owing to a press of public business; and states his cordial approbation of the purpose of the meeting, and his desire of giving it every effect.

The Resolution being then put by the noble Chairman, was carried unanimously.

MR. WEDGEWOOD.

My Lord Liverpool, and Gentlemen :
—I am perfectly aware that I have no sort of claim to present myself to your notice, except that of having been selected in the course of the arrangements usual on such occasions, to make a motion ; and I shall not trespass upon your time by entering upon the subject before the meeting, because, by so doing, I could only weaken the effect of what you have heard. I beg leave, however, to express the pleasure that I feel in being the organ, as the temporary representative of the body to which I belong, the manufacturers of Great Britain, of conveying to your Lordship their thanks for the honour your Lordship has done them, in presiding this day on an occasion so interesting to them ; and I trust I may be farther allowed to indulge myself, in the expression of my personal

gratitude, and my respect and admiration for the great man whose memory we are met to celebrate :—I move

“ That the thanks of this meeting be
 “ given to the Right Honourable the Earl
 “ of Liverpool, &c. &c.”

MR. WILBERFORCE.

My Lord :—Although I abundantly participate in the sentiments and feelings which have been so powerfully expressed by those who have gone before me, and rejoice in the opportunity with which I am honoured of publicly declaring my sense of the claim of that extraordinary man, the late Mr. Watt, to the admiration and gratitude of his country, the duty which I have to discharge is not so much that of paying to his character my willing tribute of applause, as to express the satisfaction which I feel in seeing the first minister of

the crown occupying the chair this day, as the just representative of our gracious sovereign ; and at the same time that he expresses his own feelings, conveying to us those of his royal master. I congratulate you, my lord, on the proof you hereby afford, that you recognise the just use to be made of superior rank and station. Well, indeed, does it become your lordship to come forward on the present occasion ; and in your sovereign's name, as well as in your own, to call upon the nation at large to testify the respect that is due to the character of that great man, whose claims to public distinction we are now commemorating. The duty you have to perform, my lord, is no less, I am persuaded, enforced on you by the sense of duty, than it is congenial to your personal feelings : for as one who from your public

station cannot but take a peculiar interest in the well-being and prosperity of your country, you cannot but delight in acknowledging the superior merits of Mr. Watt, and his just claim to the honour we are now about to assign to him. For his extraordinary talents were not exerted for his own advantage or reputation only, but have already been, and are likely to be to a still greater extent, conducive to the prosperity and aggrandisement of his country. It has been truly remarked, that praise is doubly valuable when it proceeds from one who is himself eminently deserving of it: and it has been Mr. Watt's peculiar good fortune on this day to verify the remark. His services have been this day celebrated by those who are peculiarly well qualified to appreciate their value. The President of the Royal Society in particular, in spe-

cifying Mr. Watt's claims to distinction, and in explaining the nature and merits of his inventions, pursued his course with such admirable distinctness and perspicuity, as to shed a light all around him in his progress, and to make persons as little conversant as myself with scientific subjects feel for the time that they clearly understood the nature and merits of his discoveries. It was stated to be one of the honourable peculiarities of Mr. Watt's character, that he was a stranger to that jealousy which it has been too often humiliating to detect in men of high reputation ; and it has been delightful to find the same spirit pervading the meeting this day, and especially to have heard such a full measure of commendation bestowed on Mr. Watt, by one who has himself attained such just and honourable distinction, and to whom on a future, may it be a distant

day! posterity will assign the same honours which he now calls upon us to pay to a departed brother in the paths of philosophical invention.

May I be permitted also to express a gratification of another kind which I cannot but feel in witnessing the proceedings of this day. I see myself surrounded by men of the most opposite political opinions; by those whom the different judgments they form of public events, whose different views of national interest, too commonly lead them into contention and debate; how gratifying is it to find, that when such a duty as is this day to be performed, all political distinctions are forgotten! We seem to rise into a higher region of light and truth, of genius and of science, where none of those passions darken, and none of those baser emotions discompose the atmosphere, that are gene-

rated in the scufflings of the vale below ; without a discordant opinion, we gladly unite in recognising and applauding that merit which raised its proprietor to wealth and glory ; which diffused its genial influence throughout the country at large, and, while in a thousand channels of individual industry, it multiplied the comforts of individuals, it added to the stock of national wealth and greatness. It is the glory, my lord, of the country in which we live—a glory to which in the whole history of the world no country was ever before entitled in so eminent a degree, that individuals, by the honourable exercise of their own superior talents and virtuous industry, may rise from obscurity and poverty to the highest rank and the most abundant affluence. To those who are acquainted with the fortunes of many of the public

men of our own day, it cannot be necessary for me to specify instances of this kind which must at once occur to their recollection. It is gratifying to reflect that we live in a country in which we may point to the man, who, next to the king upon the throne, occupies the highest station in the community, and say with truth, that it was not by obsequiousness and servility, by court-favour or political intrigue, that he rose to his high rank and his splendid fortune, but, through the blessing of Providence, on the honourable exercise of his own faculties ; and, as was truly remarked by my honourable friend who preceded me, it is a delightful consideration, that many a man in a humble and obscure situation, may be cheered and animated in his toilsome and exhausting course, by calling to mind that the same paths to distinction are

open to himself also, by which others before him have ascended to greatness and to glory.

My lord, it is to the free Constitution of this country, it is to the enjoyment of liberty in the administration of equal laws, that we owe these distinguished privileges; and long may a gracious Providence permit them to diffuse among us the same blessings, and to supply similar instances of successful exertion!—My lord, the very office in which we are now engaged will tend powerfully to animate our countrymen to similar efforts; and I doubt not that the honour we are now paying to the memory of Mr. Watt, will have the effect of calling forth fresh exertions of genius and utility, which some successor of your lordship, at some future meeting, may acknowledge. I could even specify living artificers of their own and their country's glory, who may

one day be honoured with similar expressions of applause. I might anticipate the day when an eulogium shall be pronounced on the magnificent labours of a Rennie, and the exquisite sculpture of a Westmacott. May we also in every instance, my lord, be able, in commemorating the claims to distinction of our superior men, to state, as I understand from those who enjoyed the privilege of being personally acquainted with Mr. Watt was eminently the case in this instance, that they may be not more eminent for the superiority of their mental powers than for their amiable character in private life. This will stamp additional value on the reputation of those who are the objects of public admiration; and when we shall contemplate the Monument of national gratitude that is to be erected in memory of this great man, in the place in which we record the names of the bene-

factors and glories of their country, it will be gratifying to reflect, that he who is the object of our present celebration, was not only respected in public, but esteemed and beloved in private life. Let me then again congratulate your lordship on the office you are this day called upon to perform—an office, in the performance of which you will allow me to say, you receive honour while you confer it. I rejoice that by taking the chair on this occasion, you give a proof that you have recognised the true use to be made of rank and influence: that they are given not merely for private enjoyment, but that they may be employed in such services as you are this day rendering. As the representative of your sovereign, you could not, I am persuaded, be employed in any office in which his feelings were more in unison with your own, than in

praising the extraordinary man on whose merits you have this day pronounced your eulogiums: thereby inviting your countrymen in general to travel in the same paths to honourable distinction; reminding them, by the example this day displayed to their view, that they live in a community in which the blessing of Providence may render them also the instruments of promoting their country's benefit, and their own glory and honour;—let them but have the same claims to distinction, and they will reap the same reward.

The Resolution was then put, and carried unanimously.

EARL OF LIVERPOOL.

Gentlemen, I have only now to return you my sincere thanks for the honour you have done me, and to assure you that no honour could have been conferred upon

me that I could have valued more than being placed in the chair on the occasion of our meeting here this day. Gentlemen, I will not detain you by entering further into the subject of this meeting. I have already testified my humble sentiments to the merits of Mr. Watt. I was certain, indeed, that with respect to these merits there could be no difference of opinion; and it is a gratification to me to feel now, what I hope I shall feel on every other similar occasion, that where the interests of science, and of the fine arts, and of genius are concerned, there is no person more desirous to promote them than myself.

I took the liberty of announcing to you at the beginning of the meeting, the command which I had received from His Majesty. I am sure it cannot surprise you that he who on every occasion of his

life has proved himself to be the patron and friend of science and the fine arts, should desire that his name may be conspicuously brought forward upon the occasion of our meeting here this day. I shall now conclude this meeting by requesting, that subscriptions may be opened; and that I am commanded by His Majesty, as I have already stated, to put down his name for 500*l.*, and I beg you will accept from me, as President, 100*l.*

NAMES OF THE COMMITTEE
FOR THE
ERECTION OF A MONUMENT
TO THE LATE
JAMES WATT.

The Earl of Liverpool, K.G.

The Earl of Aberdeen, P.A. S.S.

Right Hon. Geo. Canning, M.P. &c. &c.

Right Hon. F. Robinson, M.P. &c. &c.

Right Hon. Robert Peel, M.P. &c. &c.

Right Hon. Wm. Huskisson, M.P. &c. &c.

The Hon. Heneage Legge, M.P.

Sir Isaac Coffin, Bart. M.P.

Sir Humphrey Davy, Bart. P.R.S.

Sir James Graham, Bart. M.P.

Sir Robert Peel, Bart.

Sir Walter Scott, Bart.

Sir John Wrottesley, Bart. M.P.

Sir Thomas Lawrence, P.R.A.
Sir James Mackintosh, M.P.
Matthias Attwood, Esq. M.P.
Alex. Baring, Esq. M.P.
Henry Brougham, Esq. M.P.
J. W. Croker, Esq. M.P.
D. S. Dugdale, Esq. M.P.
Davies Gilbert, Esq. M.P.
T. F. Kennedy, Esq. M.P.
E. J. Littleton, Esq. M.P.
T. Frankland Lewis, Esq. M.P.
Francis Lawley, Esq. M.P.
Geo. Philips, Esq. M.P.
Geo. Philips, jun. Esq. M.P.
J. H. Tremaynè, Esq. M.P.
Wm. Wilberforce, Esq. M.P.
Rich. Arkwright, Esq.
Sam. Boddington, Esq.
Charles Babbage, Esq.

H. H. Birley, Esq.
 Geo. H. Barker, Esq.
 M. R. Boulton, Esq.
 John Bolton, Esq.
 W. T. Brande, Esq. Sec. R.S.
 William Clayfield, Esq.
 Rev. John Corrie.
 John Dalton, Esq.
 James Davies, Esq.
 William Cotton, Esq.
 Peter Ewart, Esq.
 Kirkman Finlay, Esq.
 Francis Freeling, Esq.
 Geo. H. Freeling, Esq.
 Rev. T. Lane Freer.
 Benj. Gott, Esq.
 Charles Hatchett, Esq.
 Wm. Henry, M.D.
 J. F. W. Herschel, Esq. Sec. R.S.

